

CLAIMS

1. A method of forming an aseptic enclosure for medical equipment, comprising the following steps:

heating a thin sheet of a thermoformable polymer to the
5 thermoforming temperature of said polymer;
clamping a peripheral portion of said sheet at spaced locations while
said sheet remains at said forming temperature; and
driving a platen including an end face having a diameter less than the
distance between said spaced locations against said sheet and through the plane of
10 said sheet, said platen drawing said sheet, reducing the thickness of said sheet and
forming a bag-like enclosure having an end wall conforming to said end face and an
integral conical side wall.

2. The method of forming an aseptic enclosure for medical equipment
15 as defined in Claim 1, wherein said method includes clamping said sheet with an
annular clamp having a generally circular internal diameter greater than said end
face of said platen and driving a platen generally circular end face against said sheet
having an outer surface generally equally spaced from said peripheral portion
forming a frustoconical side wall between said clamp and said platen.

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3. The method of forming an aseptic enclosure for medical equipment
as defined in Claim 1, wherein said platen includes a generally flat end face and said
method including drawing a vacuum through said end face of said platen and driving
said generally flat end face against said sheet, forming a bag-like enclosure having a
25 generally flat bottom wall and a frustoconical side wall.

4. The method of forming an aseptic enclosure for medical equipment as defined in Claim 1, wherein said method includes clamping said sheet with an annular clamp having an internal diameter less than an external diameter of said platen and drawing a vacuum through said annular clamp.

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5. The method of forming an aseptic enclosure for medical equipment as defined in Claim 1, wherein said method includes affixing a light-sensitive audio chip to an external surface of said sheet and coating said chip with a soluble opaque coating.

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6. The method of forming an aseptic enclosure for medical equipment as defined in Claim 5, wherein said platen includes a generally flat end face, wherein said method includes driving said end face of said platen against said sheet and forming a bag-like enclosure with a generally flat end face and embedding said light-sensitive audio chip in said generally flat end face of said enclosure.

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7. The method of forming an aseptic enclosure for medical equipment as defined in Claim 1, wherein said method includes securing an elastic band around a surface of said bag-like enclosure adjacent an open end of said enclosure.

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8. The method of forming an aseptic enclosure for medical equipment, comprising the following steps:

heating a thin film of a thermoformable medical grade polymer to the thermoforming temperature of said polymer;

5 clamping said film with a clamp having an opening therethrough while said sheet remains at said thermoforming temperature;

driving a generally flat end face of a platen having an outer diameter less than an internal diameter of said opening through said clamp against said film through the plane of said film, said platen drawing said sheet, reducing the thickness
10 of said film and forming a bag-like enclosure having a generally flat closed end and a frustoconical side wall.

9. The method of forming an aseptic enclosure for medical equipment as defined in Claim 8, wherein said method includes drawing a vacuum through said
15 clamp.

10. The method of forming an aseptic enclosure for medical equipment as defined in Claim 8, wherein said method includes drawing a vacuum through said end face of said platen.
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11. The method of forming an aseptic enclosure for medical equipment as defined in Claim 8, wherein said method includes affixing a light-sensitive audio chip to an outer surface of said film and coating said chip with a soluble opaque coating.

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12. The method of forming an aseptic enclosure for medical equipment as defined in Claim 11, wherein said method includes embedding said light-sensitive audio chip in said end face of said enclosure.

5 13. The method of forming an aseptic enclosure for medical equipment as defined in Claim 12, wherein said method includes coating said light-sensitive audio chip with a coating soluble with an antiseptic solution.

10 14. The method of forming an aseptic enclosure for medical equipment as defined in Claim 8, wherein said method includes heating a thin film of a partially translucent polyolefin medical grade polymer having a thickness of about 4 to 6 mils and drawing said film through a thickness of less than 3 mils, forming a transparent bag-like enclosure.

15 15. The method of forming an aseptic enclosure for medical equipment, comprising the following steps:

forming a flexible film of a medical grade polymer into an enclosure having a closed end and an open end adapted to receive medical equipment;

affixing a light-sensitive audio chip to an external surface of said enclosure;

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coating said light-sensitive audio chip with an opaque film soluble in an antiseptic solution.

16. The method of forming an aseptic enclosure for medical equipment as defined in Claim 15, wherein said method includes coating said light-sensitive audio chip with an opaque coating which is soluble and removable with a predetermined number of washings with an antiseptic solution.

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17. The method of forming an aseptic enclosure for medical equipment as defined in Claim 15, wherein said method includes embedding said light-sensitive audio chip in said film with an end face of said light-sensitive audio chip flush with said film.

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18. The method of forming an aseptic enclosure for medical equipment as defined in Claim 15, wherein said method further includes the following steps:

heating said film to the thermoforming temperature of said film;

clamping a peripheral portion of said film at spaced locations while

15 said film remains at said thermoforming temperature; and

driving a platen having an external diameter less than a distance between said spaced locations against said film through the plane of said film, wherein said platen draws said film, reduces its thickness and forming a bag-like enclosure having an end wall and a conical side wall.

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19. The method of forming an aseptic enclosure for medical equipment as defined in Claim 18, wherein said method includes affixing said light-sensitive audio chip to said end wall of said enclosure.

20. A bag-like aseptic enclosure for medical equipment formed of a flexible film of a medical grade polymer having a closed end and an open end for receipt of medical equipment including a light-sensitive audio chip affixed to an outer surface of said enclosure coated with an opaque coating soluble in an antiseptic solution.

21. The bag-like aseptic enclosure as defined in Claim 20, wherein said closed end of said enclosure is generally flat and said light-sensitive audio chip is affixed to said generally flat closed end of said enclosure.

22. The bag-like aseptic enclosure as defined in Claim 21, wherein said light-sensitive audio chip is embedded in said generally flat closed end of said enclosure having an end face generally flush with said flat end.

23. The bag-like aseptic enclosure as defined in Claim 21, wherein said enclosure includes a frustoconical side wall surrounding said generally flat end.

24. The bag-like aseptic enclosure as defined in Claim 20, wherein said enclosure includes a flexible elastic band adjacent said open end of said enclosure.

25. The bag-like aseptic enclosure for medical equipment formed of a flexible film of a medical grade polymer comprising a generally flat end wall, a frustoconical side wall integral with said end wall having a minor diameter adjacent said end wall, an open end adjacent a major diameter of said frustoconical side wall and a flexible elastic band adjacent said open end.

26. The bag-like aseptic enclosure for medical equipment as defined in Claim 25, wherein said bag-like aseptic enclosure includes a light-sensitive audio chip affixed to an outer surface of said enclosure and an opaque coating over said light-sensitive audio chip wherein said opaque coating is soluble in an antiseptic solution.

27. The bag-like aseptic enclosure as defined in Claim 26, wherein said opaque coating may be removed by a predetermined number of washings with an antiseptic solution.

28. The bag-like aseptic enclosure as defined in Claim 26, wherein said light-sensitive audio chip is affixed to said end wall of said enclosure.